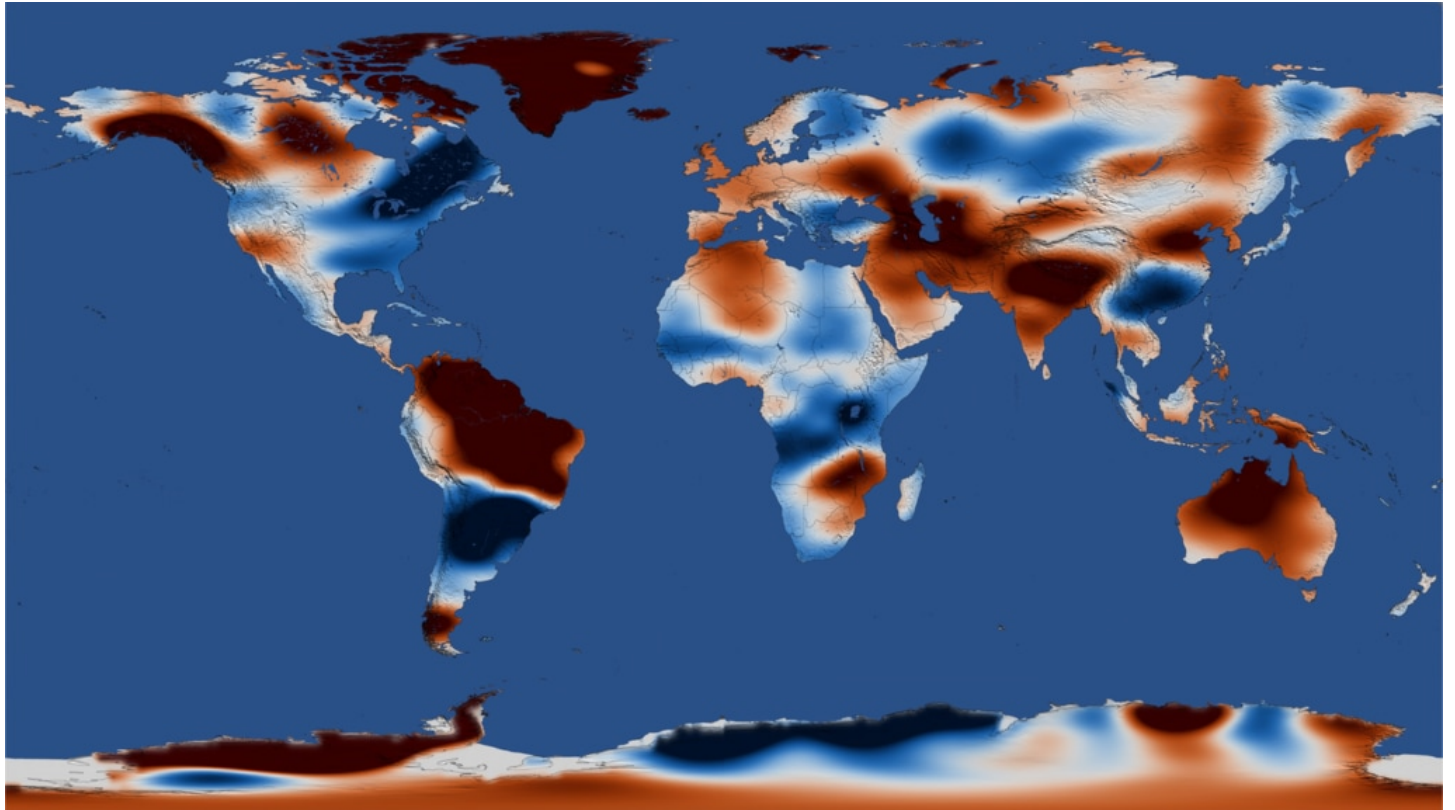

My NASA Data - Mini Lesson

A Map of Freshwater



Freshwater is found in lakes, rivers, soil, snow, groundwater and ice, and is one of the most essential of Earth's resources, for drinking water and agriculture. However, the distribution of freshwater around the planet is changing.

Researchers used a pair of satellites called the Gravity Recovery and Climate Experiment, or GRACE, to track freshwater movement over the last fifteen years. The twin GRACE satellites were launched in 2002 as a joint mission between NASA and the German Aerospace Center (DLR). The two satellites precisely measured the distance between themselves to detect changes in Earth's gravity field caused by movements of mass on the planet below, caused by shifts in water and ice. They found that some regions' water supplies are relatively stable, others experienced increases or decreases.

Climate change has driven freshwater loss from the ice sheets at the poles, which has implications for sea level rise. Other areas saw groundwater depletions because of humans using water for irrigating crops or increases due to higher amounts of rainfall because of natural variability. Watch the videos to learn more.

